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			2144	

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,027

Applicant(s)

TRAN ET AL.

Examiner

Tam (Jenny) Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/09/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 38, 40-42, 53-57 and 61-99 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims pending in the application are 2-4,6-7,11-13,17-19,21,22,24,26-33,35,36,38,40-42,53-57, and 61-99.

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DETAILED ACTION

1. This application has been examined. Amendment received on 11/09/2004 has been entered. Claims 1, 5, 8, 10, 14-16, 20, 23, 25, 28-30, 34, 37, 39, 43-52, and 58-60 are cancelled. Claims 7, 9, 11-12, 22, 24, 26, 36, 38, 40, 42, 62, 67, and 71 are amended while claims 84-99 are newly added.

2. Claims 2-4,6,7,11-13,17-19,21,22,24,26-33,35,36,38,40-42,53-57 and 61-99 are presented for examination.

Priority

3. This application claims benefit of the provisional application 60/234,996 (09/25/2000).

4. The effective filing date for the subject matter defined in the pending claims, which has support in Provisional Application 60/234,996 in this application, is 05/25/2000. Any new subject matter defined in the claims not previously disclosed in Application 60/234,996, is entitled to the effective filing date of 12/29/2000.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

6. Claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 38, 40-42, 53-57 and 61-99 are rejected under 35 U.S.C. 102(e) as being anticipated by Burns et al. (U.S. Patent Number 6,324,182), hereinafter referred to as Burns.

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7. Regarding claim 62, Burns disclosed a method for making electronic information more readily available to one or more access requestors (Title, Figures 2-3, 6), the method comprising: identifying for transport electronic information stored at a data source [content server] (Figures 2-3, 6); transporting the identified electronic information from the data source to a requesting access requestor [subscriber PC] (Figures 2-3, 6); anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information (column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31, lines 56-65); determining, based on a size [capacity] of the electronic information and the anticipated demand, to store the already identified and transported electronic information on a storage medium that is more accessible to the access requestors than the data source [cache server] (Figures 2-3, 6, column 3 lines 12-30, column 4 lines 31-47, lines 50-58, column 8 lines 23-40, column 10 lines 11-22, column 11 lines 1-19); and storing the transported electronic information on the storage medium (column 4 lines 31-47, lines 50-58, column 8 lines 23-40, column 10 lines 37-58).

8. Regarding claim 63, Burns disclosed a method wherein the electronic information is identified for transport based on a request of the requesting access requestor to access the electronic information (column 4 lines 2-15, column 8 lines 23-40).

9. Regarding claim 64, Burns disclosed a method wherein anticipating the demand based at least on information that is not particular to any single access requestor comprises anticipating the demand based on information that is common to multiple access requestors (column 4 lines 31-47, column 7 lines 42-60, column 9 lines 12-34).

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10. Regarding claim 65, Burns disclosed a method wherein anticipating the demand based at least on information that is not particular to any single access requestor comprises anticipating the demand based on information that is retrieved from several access requestors (column 4 lines 31-47, column 7 lines 42-60, column 11 lines 20-48).

11. Regarding claim 66, Burns disclosed a method wherein anticipating the demand based at least on information that is not particular to any single access requestor comprises anticipating the demand based on information that is related to none of the access requestors (column 4 lines 31-47, column 7 lines 42-60, column 9 lines 12-34).

12. Regarding claim 81, Burns disclosed a method wherein the access requestors comprise a class of access requestors (column 9 lines 12-34, column 10 lines 23-36).

13. Regarding claim 84, Burns disclosed a method wherein the non-electronic information is indicative of a popularity of a topic associated with the electronic information (column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31).

14. Regarding claim 85, Burns disclosed a method wherein the popularity is the popularity for a class of access requestors (column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31).

15. Regarding claim 86, Burns disclosed a method wherein the non-electronic information is indicative of past requests for information similar to the electronic information (column 4 lines 2-15, column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31).

16. Regarding claim 87, Burns disclosed a method wherein anticipating a demand of the access requestors for access to the electronic information further comprises

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anticipating the demand of the access requests for access to the electronic information based on information related to the electronic information that is not particular to any single access requestor (column 10 lines 17-22, lines 25-36, lines 41-47).

17. Regarding claim 2, Burns disclosed a method further comprising: determining whether the electronic information is accessible to the access requestors from the storage medium, wherein the access requestors are provided with access to the electronic information from the data source only if the electronic information is not accessible to the access requestors from the storage medium (column 8 lines 23-40).

18. Regarding claim 3, Burns disclosed a method wherein the storage medium is more geographically proximate to the access requestors than the data source such that the storing includes storing the electronic information on a medium that is more geographically proximate to the access requestors than the data source (column 4 lines 50-58, column 10 lines 23-36).

19. Regarding claim 4, Burns disclosed a method wherein the storage medium is more electronically proximate to the access requestors than the data source such that the storing includes storing the electronic information on a medium that is more electronically proximate to the access requestors than the data source (column 4 lines 31-47, column 8 lines 23-40).

20. Regarding claim 6, Burns disclosed a method wherein the data source resides on a central server and the storage medium resides on a distributed server such that the storing includes duplicating the electronic information from the central server to the distributed server (Figures 2-3, 6, column 7 lines 44-60, column 12 lines 14-24).

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21. Regarding claim 7, Burns disclosed a method wherein the demand is anticipated based on at least one of past and current requests for access to the same electronic information by the access requestors.

22. Regarding claim 9, Burns disclosed a method wherein the demand is anticipated based on at least one of current and past requests for access to related electronic information by the access requestors.

23. Regarding claim 11, Burns disclosed a method wherein anticipating the demand of the access requestors for access to the electronic information includes measuring a number of requests for the electronic information, and comparing the number of requests to a threshold (column 8 lines 41-61, column 11 lines 1-14).

24. Regarding claim 12, Burns disclosed a method wherein anticipating the demand of the access requestors for access to the electronic information includes measuring a frequency of requests for access to the electronic information (column 8 lines 41-67, column 9 lines 11-34).

25. Regarding claim 13, Burns disclosed a method wherein the size of the electronic information is a file size of the electronic information and the anticipated demand for the electronic information is based on the frequency of requests for the electronic information (column 8 lines 41-67, column 9 lines 11-34).

26. Regarding claims 67-70, 82, 88-91, 17-19, 21-22, 24, and 26, the system corresponds to the method of claims 62, 64-66, 81, 84-87, 2-4, 6-7, 9, and 12, and thus these claims are rejected using the same rationale.

27. Regarding claim 27, Burns disclosed a method wherein the determination software module size module that determines a file size [capacity] of the electronic

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information; and an assigning module that assigns a cache value to the electronic information based on the file size [capacity] and the anticipated demand wherein the determination software module determines to store the electronic information based on the cache value of the electronic information (column 3 lines 12-30, column 4 lines 2-15, column 11 lines 1-19).

28. Regarding claims 71-74, 83, 92-95, 31-33, 35-36, 38, 40, and 42, the computer readable medium having embodied thereon a computer program corresponds to the method of claims 62, 64-66, 81, 84-87, 2-4, 6-7, 9, & 12 and the system of claims 67-70, 82, 88-91, 17-19, 21-22, 24, & 26 and thus these claims are rejected using the same rationale.

29. Regarding claim 41, the computer readable medium having embodied thereon a computer program corresponds to the system of claim 27 and thus is rejected using the same rationale.

30. Regarding claim 75, Burns disclosed a method for making electronic information more readily available to one or more first access requestors based on an anticipated demand for the electronic information, the method comprising: anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information; determining to duplicate electronic information from a data source to a storage medium that is more accessible to the first access requestors based on a size of the electronic information and on the anticipated demand; accessing the electronic information stored on the data source, and duplicating the electronic information to the storage medium (Figures 2-3, 6, column

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4 lines 31-47, column 8 lines 23-59, column 9 lines 1-24, lines 56-65, column 10 lines 11-37, column 11 lines 1-31, lines 40-48).

31. Regarding claim 76, Burns disclosed a method wherein the non-electronic information is indicative of a popularity of a topic associated with the electronic information (column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31).

32. Regarding claim 77, Burns disclosed a method wherein the popularity is the popularity for a class of access requestors (column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31).

33. Regarding claim 78, Burns disclosed a method wherein the non-electronic information is indicative of past requests for information similar to the electronic information (column 4 lines 2-15, column 8 lines 41-59, lines 41-59, column 9 lines 12-34, column 11 lines 20-31).

34. Regarding claim 79, Burns disclosed a method wherein the past requests for information are past requests of a class of access requestors (column 9 lines 12-34, column 10 lines 23-36).

35. Regarding claim 80, Burns disclosed a method wherein the class of access requestors comprises the first access requestors (column 9 lines 12-34, column 10 lines 23-36).

36. Regarding claim 53, Burns disclosed a method further comprising: determining whether the electronic information is accessible to the first access requestors from the storage medium wherein the first access requestors are provided with access to the electronic information from the data source only if the electronic information is not

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accessible to the first access requestors from the storage medium (column 8 lines 23-40).

37. Regarding claim 54, Burns disclosed a method wherein the storage medium is more geographically proximate to the first access requestors than the data source such that the duplicating includes duplicating the electronic information on a medium that is more geographically proximate to the first access requestors than the data source (column 4 lines 50-58, column 10 lines 23-36).

38. Regarding claim 55, Burns disclosed a method wherein the storage medium is more electronically proximate to the first access requestors than the data source such that the duplicating includes duplicating the electronic information on a medium that is more electronically proximate to the first access requestors than the data source (column 4 lines 31-47, column 8 lines 23-40).

39. Regarding claim 56, Burns disclosed a method wherein the storage medium provides faster completion of an access request than the data source such that the providing includes providing faster access to the electronic information by the first access requestors (column 7 lines 44-60, column 12 lines 14-23).

40. Regarding claim 57, Burns disclosed a method wherein the demand is further anticipated based on past requests for access to other electronic information by a plurality of second access requestors, who may be different than the first access requestors (column 8 lines 41-61, column 9 lines 1-34).

41. Regarding claim 61, Burns disclosed a method wherein the demand is further anticipated based on criteria unrelated to past access requests for the electronic information (column 4 lines 31-47, column 7 lines 44-60).

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42. Regarding claims 96-99, the method of populating the distributed cache and its limitations are similar to the method for making electronic information more readily available to one or more first access requestors of claims 75-78 and thus these claims are rejected using the same rationale.

43. Since all the limitations of the claimed invention were disclosed by Burns, claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 38, 40-42, 53-57 and 61-99 are rejected.

Claim Rejections - 35 USC § 103

44. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

45. Claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 38, 40-42, 53-57 and 61-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pirolli et al. (U.S. Patent Number 6,098,064), hereinafter referred to as Pirolli, in view of Malkin et al. (U.S. Patent Number 6,085,193), hereinafter referred to as Malkin.

46. Regarding claim 62, Pirolli disclosed a method for making electronic information more readily available to one or more access requestors, the method comprising: identifying for transport electronic information stored at a data source; transporting the identified electronic information from the data source to a requesting access requestor; anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information; and storing the transported electronic information on the storage medium (Abstract, Figures

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1-5, column 1 lines 41-56, column 2 lines 43-51, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 18-51).

47. Pirolli taught the invention substantially as claimed. However, Pirolli did not expressly teach a step of determining, based on a size of the electronic information and the anticipated demand, to store the already identified and transported electronic information on a storage medium that is more accessible to the access requestors than the data source.

48. Pirolli suggested exploration of art and/or provided a reason to modify the method of Pirolli with the step of determining, based on a size of the electronic information and the anticipated demand, to store the already identified and transported electronic information on a storage medium that is more accessible to the access requestors than the data source (column 1 lines 41-56).

49. Malkin disclosed determining, based on a size of the electronic information and the anticipated demand, to store the already identified and transported electronic information on a storage medium that is more accessible to the access requestors than the data source (column 8 lines 22-29, lines 38-55, column 9 lines 3-19).

50. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Pirolli with the teachings of Malkin to include the determining file size step in order to optimize load balancing since depending on the document size and the available transmission rate, delivery of the document to the user could take a significant amount of time (Pirolli, column 1 lines 41-50).

51. Regarding claim 64, Pirolli disclosed a method wherein the electronic information is identified for transport based on a request of the requesting access requestor to access the electronic information (column 1 lines 41-56, column 5 lines 52-61).

52. Regarding claim 64, Pirolli disclosed a method wherein anticipating the demand based at least on information that is not particular to any single access requestor comprises anticipating the demand based on information that is common to multiple access requestors (column 18-51).

53. Regarding claim 65, Pirolli disclosed a method wherein anticipating the demand based at least on information that is not particular to any single access requestor comprises anticipating the demand based on information that is retrieved from several access requestors (column 18-51).

54. Regarding claim 65, Pirolli disclosed a method wherein anticipating the demand based at least on information that is not particular to any single access requestor comprises anticipating the demand based on information that is related to none of the access requestors (column 2 lines 43-51).

55. Regarding claim 81, Pirolli disclosed a method wherein the access requestors comprise a class of access requestors (column 11 lines 37-51).

56. Regarding claim 2, Pirolli disclosed a method further comprising: determining whether the electronic information is accessible to the access requestors from the storage medium, wherein the access requestors are provided with access to the electronic information from the data source only if the electronic information is not accessible to the access requestors from the storage medium (column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 52-67).

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57. Regarding claim 84, Pirolli disclosed a method wherein the non-electronic information is indicative of a popularity of a topic associated with the electronic information (column 1 lines 27-40, column 11 lines 18-51).

58. Regarding claim 85, Pirolli disclosed a method wherein the popularity is the popularity for a class of access requestors (column 1 lines 27-40, column 11 lines 18-51).

59. Regarding claim 86, Pirolli disclosed a method wherein the non-electronic information is indicative of past requests for information similar to the electronic information (column 1 lines 27-40, column 11 lines 18-51).

60. Regarding claim 87, Pirolli disclosed a method wherein anticipating a demand of the access requestors for access to the electronic information further comprises anticipating the demand of the access requests for access to the electronic information based on information related to the electronic information that is not particular to any single access requestor (column 1 lines 27-40, column 5 lines 3-14, lines 52-61, column 7 lines 20-29).

61. Regarding claim 3, Pirolli disclosed a method wherein the storage medium is more geographically proximate to the access requestors than the data source such that the storing includes storing the electronic information on a medium that is more geographically proximate to the access requestors than the data source (column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 52-67).

62. Regarding claim 4, Pirolli disclosed a method wherein the storage medium is more electronically proximate to the access requestors than the data source such that the storing includes storing the electronic information on a medium that is more

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electronically proximate to the access requestors than the data source (column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 52-67).

63. Regarding claim 6, Pirolli disclosed a method wherein the data source resides on a central server and the storage medium resides on a distributed server such that the storing includes duplicating the electronic information from the central server to the distributed server (Figures 1, 3, column 11 lines 19-51).

64. Regarding claim 7, Pirolli disclosed a method wherein the demand is anticipated based on at least one of past and current requests for access to the same electronic information by the access requestors (column 3 lines 6-17, column 5 lines 39-51, column 11 lines 18-51).

65. Regarding claim 9, Pirolli disclosed a method wherein the demand is anticipated based on at least one of current and past requests for access to related electronic information by the access requestors (column 3 lines 6-17, column 5 lines 39-51, column 11 lines 18-51).

66. Regarding claim 11, Pirolli disclosed a method wherein anticipating the demand of the access requestors for access to the electronic information includes measuring a number of requests for the electronic information, and comparing the number of requests to a threshold (column 7 lines 50-59, column 8 lines 50-62).

67. Regarding claim 12, Pirolli disclosed a method wherein anticipating the demand of the access requestors for access to the electronic information includes measuring a frequency of requests for access to the electronic information (column 5 lines 3-14, lines 26-38, column 11 lines 37-51).

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68. Regarding claim 13, Pirolli disclosed a method wherein the size of the electronic information is a file size of the electronic information and the anticipated demand for the electronic information is based on the frequency of requests for the electronic information (column 1 lines 41-56, column 3 lines 6-17, column 5 lines 39-51, column 11 lines 18-51).

69. Regarding claims 67-70, 82, 88-91, 17-19, 21-22, 24, and 26, the system corresponds to the method of claims 62, 64-66, 81, 84-87, 2-4, 6-7, 9, and 12, and thus these claims are rejected using the same rationale.

70. Regarding claim 27, Pirolli disclosed a system wherein the determination software module size module that determines a file size of the electronic information; and an assigning module that assigns a cache value to the electronic information based on the file size and the anticipated demand wherein the determination software module determines to store the electronic information based on the cache value of the electronic information (Abstract, column 8 lines 22-29, lines 38-55, column 9 lines 3-19).

71. Regarding claims 71-74, 83, 92-95, 31-33, 35-36, 38, 40, and 42, the computer readable medium having embodied thereon a computer program corresponds to the method of claims 62, 64-66, 81, 84-87, 2-4, 6-7, 9, & 12 and the system of claims 67-70, 82, 88-91, 17-19, 21-22, 24, & 26 and thus these claims are rejected using the same rationale.

72. Regarding claim 75, Pirolli and Malkin combined disclosed a method for making electronic information more readily available to one or more first access requestors based on an anticipated demand for the electronic information, the method comprising: anticipating a demand of the access requestors for access to the electronic information

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based at least on non-electronic information related to the electronic information; determining to duplicate electronic information from a data source to a storage medium that is more accessible to the first access requestors based on a size of the electronic information and on the anticipated demand; accessing the electronic information stored on the data source, and duplicating the electronic information to the storage medium (Pirolli, Figures 1 & 3, column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 19-51, lines 52-67; Malkin, Abstract, column 8 lines 22-29, lines 38-55, column 9 lines 3-19).

73. Regarding claim 76, Pirolli disclosed a method wherein the non-electronic information is indicative of a popularity of a topic associated with the electronic information (column 1 lines 27-40, column 11 lines 18-51).

74. Regarding claim 77, Pirolli disclosed a method wherein the popularity is the popularity for a class of access requestors (column 1 lines 27-40, column 11 lines 18-51).

75. Regarding claim 78, Pirolli disclosed a method wherein the non-electronic information is indicative of past requests for information similar to the electronic information (column 1 lines 27-40, column 11 lines 18-51).

76. Regarding claim 79, Pirolli disclosed a method wherein the past requests for information are past requests of a class of access requestors (column 11 lines 37-51).

77. Regarding claim 80, Pirolli disclosed a method wherein the class of access requestors comprises the first access requestors (column 11 lines 37-51).

78. Regarding claim 53, Pirolli disclosed a method further comprising: determining whether the electronic information is accessible to the first access requestors from the

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storage medium wherein the first access requestors are provided with access to the electronic information from the data source only if the electronic information is not accessible to the first access requestors from the storage medium (column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 52-67).

79. Regarding claim 54, Pirolli disclosed a method wherein the storage medium is more geographically proximate to the first access requestors than the data source such that the duplicating includes duplicating the electronic information on a medium that is more geographically proximate to the first access requestors than the data source (column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 52-67).

80. Regarding claim 55, Pirolli disclosed a method wherein the storage medium is more electronically proximate to the first access requestors than the data source such that the duplicating includes duplicating the electronic information on a medium that is more electronically proximate to the first access requestors than the data source (column 1 lines 41-56, column 5 lines 52-61, column 6 lines 45-61, column 11 lines 52-67).

81. Regarding claim 56, Pirolli disclosed a method wherein the storage medium provides faster completion of an access request than the data source such that the providing includes providing faster access to the electronic information by the first access requestors (column 1 lines 41-56, column 2 lines 43-51, column 5 lines 53-61).

82. Regarding claim 57, Pirolli disclosed a method wherein the demand is further anticipated based on past requests for access to other electronic information by a

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plurality of second access requestors, who may be different than the first access requestors (column 11 lines 18-35).

83. Regarding claim 61, Pirolli disclosed a method wherein the demand is further anticipated based on criteria unrelated to past access requests for the electronic information (column 2 lines 43-51).

84. Regarding claims 96-99, the method of populating the distributed cache and its limitations are similar to the method for making electronic information more readily available to one or more first access requestors of claims 75-78 and thus these claims are rejected using the same rationale.

85. Since all the limitations of the claimed invention were disclosed by the combination of Pirolli and Malkin, claims 2-4, 6, 7, 11-13, 17-19, 21, 22, 24, 26-33, 35, 36, 38, 40-42, 53-57 and 61-99 are rejected.

Response to Arguments

86. Applicants' arguments filed 11/09/2004 have been fully considered but they are not persuasive.

87. In the argument filed 11/09/2004 (page 1), applicants explained what the non-electronic information might be (i.e. popularity of a topic associated with the electronic information, the popularity for a class of access requestors, indicative of pass request for information similar to the electronic information). However, applicants failed to define the terms electronic information and non-electronic information to better distinguish and clarify their meanings. Accordingly, electronic information was interpreted to mean the actual content presented in the electronic information and the non-electronic information

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was interpreted to mean any metadata that are related to the content of the electronic information but are not the actual content of the electronic information itself.

88. Burn disclosed, "For each URL, the hit recorder records hit information in a URL hit database. The hit information includes the date/time of the request, the subscriber who made the request, and other information. The hit recorder also triggers a pattern recognizer which draws on information in the URL hit database to detect repetitive access behavior patterns based on subscriber requests. The pattern recognizer performs statistical analyses using hit data from the URL hit database to determine usage patterns that help the local service provider be more responsive to the needs of its clientele" (column 8 lines 41-59). Thus, it should be obvious that the hit information is the non-electronic information related to the electronic information. In addition, Burns also disclosed, "The pattern recognizer is also responsive to operator input to allow adjustment or tuning by the operator for specialized analysis" (column 8 lines 57-59). This suggested that the operator could configure the pattern recognizer to anticipate demand based on any information whether it was the content of the electronic information or the non-electronic information related to the electronic information.

89. In response to applicants' argument "Burns does not describe or suggest anticipating a demand for access to electronic information based on non-electronic information related to the electronic information", the Examiner respectfully disagrees.

90. In response to applicant's arguments that

"Burns discloses monitoring subscriber requests to determine a pattern of which content (i.e., electronic information) is most frequently requested and when, and scheduling a request to send to the content provider for electronic information at an appropriate time" and

"Burns discloses monitoring electronic communications (e.g., subscriber requests for content) to determine a pattern of requests for particular electronic content. Thus, Burns discloses anticipating a demand for electronic information (i.e., content of a Web pages or a video) based on electronic information (i.e., subscriber requests for the electronic information), and does not disclose anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information",

91. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). The caching method and system of Burns disclosed more than one implementation in anticipating a demand of the access requestors for access to the electronic information. For instance, Burns disclosed "the system makes an intelligent choice as to which content is likely to be requested by its subscribers and then makes only this content readily available to the subscribers" (column 10 lines 17-23). Burns further disclosed, "The pattern recognizer for a Seattle-based service provider might therefore schedule proportionally more Seattle related content than, say, a London-based service provider" (column 10 lines 30-33). Burns also disclosed, "The system and method described above places the authority for deciding which content is pre-cached at the local service provider. This allows the local service provider to adapt to the often changing patterns of its clientele. However, in another implementation, the content servers can be given the governing authority of deciding when and what content to download to the ISPs prior to peak times" (column 10 lines 37-47). It should be obvious then that the method and system of Burns anticipate a demand of the access requestors for access to the electronic information

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based on the content of the electronic information as well as the non-electronic information that are related to the electronic information.

92. In response to Applicants' arguments that Pirolli and Malkin do not teach or suggest "anticipating a demand of the access requestors for access to the electronic information based at least on non-electronic information related to the electronic information", the Examiner again respectfully disagrees. The non-electronic information was interpreted to mean any metadata that are related to the content of the electronic information but are not the content of the electronic information itself. Thus, the recency of document use and the frequency of document use disclosed in Pirolli are not the content of the electronic information but are metadata information that are related to the content of the electronic information. Accordingly, the data access patterns and object size used for pre-fetching electronic information disclosed in Malkin are also not the content of the electronic information but are the metadata information that are related to the content of the electronic information.

93. In response to the administrative matter regarding the canceling of claim 1, the Examiner is appreciative of applicants' courtesy to direct paragraph 7 to claim 62 rather than cancelled claim 1.

94. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

Conclusion

95. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

96. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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tp

March 2, 2005